

Claims

- [c1] 1.A food waste disposer, comprising:
- a food conveying section;
 - a grinding mechanism;
 - a motor operably connected to the grinding mechanism; and
 - a discharge chamber generally surrounding the grinding mechanism.
- [c2] 2.The food waste disposer of claim 1, wherein the grind mechanism includes a shredder plate that is rotatable by the motor.
- [c3] 3.The food waste disposer of claim 2, wherein the grind mechanism includes a stationary grind ring.
- [c4] 4.The food waste disposer of claim 3, wherein the shredder plate defines a plane, and wherein at least a portion of the discharge chamber is located above the plane.
- [c5] 5.The food waste disposer of claim 4, wherein the discharge chamber defines a discharge port, and wherein at least a portion of the discharge port is located above the plane.

- [c6] 6.The food waste disposer of claim 1, wherein the discharge chamber and the grind ring define a gap therebetween.
- [c7] 7.The food waste disposer of claim 6, wherein the discharge chamber defines a discharge port, and wherein the gap defines a cross-sectional area that increases from a first location to the discharge port.
- [c8] 8.The food waste disposer of claim 2, further comprising a plurality of lugs attached to the shredder plate.
- [c9] 9.The food waste disposer of claim 1, wherein the motor is a brushless permanent magnet (BPM) motor.
- [c10] 10.A food waste disposer, comprising:
a food conveying section;
a grinding mechanism; and
a brushless permanent magnet (BPM) motor operably connected to the grinding mechanism.
- [c11] 11.The food waste disposer of claim 10, wherein the BPM motor includes a rotor situated to rotate relative to a stator, the rotor including a plurality of magnets situated in a core section of the rotor.
- [c12] 12.The food waste disposer of claim 10, further comprising a discharge chamber, wherein the grind mecha-

nism includes a shredder plate defining a plane, and wherein at least a portion of the discharge chamber is located above the plane.

[c13] 13.The food waste disposer of claim 12, wherein the discharge chamber defines a discharge port, and wherein at least a portion of the discharge port is located above the plane.

[c14] 14.The food waste disposer of claim 12, wherein the grind mechanism includes a grind ring, and wherein the discharge chamber and the grind ring define a gap therebetween.

[c15] 15.The food waste disposer of claim 14, wherein a cross-sectional area of the gap increases from a first location to a discharge port defined by the discharge chamber.

[c16] 16.The food waste disposer of claim 12, further comprising a plurality of lugs attached to the shredder plate.

[c17] 17.A food waste disposer, comprising:
a food conveying section;
a grind ring;
a rotatable shredder plate; and
means for rotating the shredder plate.

- [c18] 18. The food waste disposer of claim 17, further comprising means for discharging food waste from the disposer.
- [c19] 19. A method of operating a food waste disposer including a grinding mechanism, the grinding mechanism having a stationary grind ring and a shredder plate that is rotatable relative to the grind ring, the method comprising:
- receiving food waste into the grinding mechanism;
 - rotating the shredder plate to grind the food waste against the grinding mechanism; and
 - discharging the ground food waste from the grinding mechanism via a discharge chamber surrounding the grinding mechanism.
- [c20] 20. The method of claim 19, wherein rotating the shredder plate includes operating a brushless permanent magnet motor having a shaft connected to the shredder plate.